Georgia Aster (Symphyotrichum georgianum)



Georgia aster by Michele Elmore, TNC-GA

Plant description

Georgia aster has large flower heads, 5 cm across, marked by dark purple rays encircling white to lavender disk flowers.

Flowering occurs from early October to mid-November. The tiny disk flowers are white, fading to a light or dull lavender, tan, or white as they mature. The plants tiny fruit, which contain a single seed each, are up to 4 millimeters long, with evenly distributed, small, hair-like structures. Georgia aster can be distinguished by the combination of dark purple rays, and white to lavender disk flowers.

Habitat and range

Georgia aster lives in woodlands or piedmont prairies dominated by native plants, with acidic soils that vary from sand to heavy clay. The primary controlling factor appears to be the availability of light – the plant tends to compete well for resources until it begins to get shaded out by woody plants. Populations can persist in the shade, but these rarely flower, instead reproducing by sending out underground stems which send out new shoots.

Georgia aster is a relict species of post oak savanna/prairie communities that existed across much of the southeastern United States prior to widespread fire suppression and the disappearance of large native grazing animals (e.g., bison).

Georgia aster is currently found in five counties in Alabama, 15 in Georgia, nine in North Carolina, and 14 in South Carolina. It was once known from Florida, but is no longer found there. Across its range, 146 total populations have been known, of these, 28 have likely disappeared.

In most cases the exact cause of the disappearance was not documented, but herbicides, highway construction, fire suppression, and residential and industrial development have all altered the landscape where Georgia aster historically occurred.

Threats

Habitat loss due to development has been considered a threat to the plant throughout its range, and continues to be an issue in places.

Since the plant prefers open areas, disturbance (fire, native grazers, etc.) is a part of this plant's habitat requirements. The historic sources of disturbance have been virtually eliminated from its range, except where road, railroad, and utility rights-of-way maintenance are mimicking the missing natural disturbances. This lack of disturbance allows woody plants to grow and shade-out the Georgia aster.

Due to the elimination of historic sources of disturbance, most of the known remaining populations of Georgia aster are adjacent to roads, railroads, utility rights of way and other openings where land management mimics natural disturbance regimes. At these locations, Georgia aster is vulnerable to accidental destruction from herbicide application, road shoulder grading, and other maintenance activities, though careful planning can prevent these impacts.

Deer browse and seed consumption by insect larvae have also been noted.

Ctatue

In 1999, the Service made Georgia aster a candidate for inclusion on the Federal endangered species list, meaning it warranted inclusion on the list, but other species were a higher priority.

